<u>ABSTRACT OF THE DISCLOSURE</u>

Many existing scheduling systems for real-time systems preempt executing processes and schedule tasks based on priority. This increases the

5 overhead of the system by the time it takes to swap out the context of the interrupted process and replacing it with the context of the interrupting process. An embodiment of the present invention schedules tasks that are broken into a number of short actions, without preempting the actions as they are executed and without assigning a priority to tasks. In this manner, the embodiment of

10 the present invention decreases the overhead as compared to many existing systems.